

Background note: Universal Access to Assistive Devices for Children with Disabilities

Introduction

Children with disabilities face extreme disparities and daunting challenges in enjoying academic, social, and community participation in low and middle income countries.¹ Accessible and assistive technologies are a critical means to bridge the disparity/gaps between children with and without disabilities, and offer an important solution in leveling the playing field for children with disabilities.²⁻

³⁻⁴ Assistive devices cover a wide range of “devices or systems that allow individuals to perform tasks they would otherwise be unable to do or increase the ease and safety with which tasks can be performed,”⁵ and range from low-tech devices, such as pictorial communication boards or adapted eating utensils, to high-tech devices, such as adapted software and voice output devices with speech synthesis.⁶

Assistive devices can empower children with disabilities by enhancing functioning in activities of daily living, early childhood development, recreation, socialization, mobility, and such education-related skills as reading, learning and studying, math, writing, composition, communication, and computer access.⁷ By facilitating the participation, inclusion, and mainstreaming of children with disabilities, assistive devices can significantly impact their self-image, self-esteem and sense of self-worth.

Access to appropriate assistive devices has ripple benefits beyond the user of the devices. When children with disabilities are able to be independent within the home and go to school, caregivers – most frequently mothers and other female members of the family - need not be tied up at home and would have the opportunity to earn and add to the household income. In some cases, siblings have to play the role of caregivers many times depriving them of the opportunity to go to school and participate in the community themselves. Thus promoting access to assistive devices for children with disabilities can have direct and indirect impacts on the socioeconomic development of the entire household.

¹ WHO/World Bank. 2011. World Report on Disability. Geneva. <http://www.who.int/disabilities/worldreport/2011/en/index.html>

² *Id.*

³ Ground, A., Lim, N., & Larsson, H. (2010). Effective use of Assistive Technologies for inclusive education in Developing countries: Issues and challenges from two case studies. *International Journal of Education and Development using Information and Communication Technology*, 6(4), 5-26.

⁴ Scherer, M.J. (2009). Assistive Technology and Persons with Disabilities. In I. Marini & M. Stebnicki (eds.), *Professional Counselor Desk Reference* (pp. 735-746). New York: Springer Publishing Co.

⁵ WHO Centre for Health Development. (2004). A glossary of terms for community health care and services for older persons. *Ageing and Health Technical Report, Volume 5*. Retrieved September 27, 2012 from http://www.who.int/kobe_centre/ageing/ahp_vol5_glossary.pdf

⁶ Kirsch, N.L. & Scherer, M.J. (2009). Assistive technology for cognition and behavior. In R.G. Frank, M. Rosenthal & B. Caplan (eds.) *Handbook of Rehabilitation Psychology, 2nd edition*, Washington, DC: APA Books.

⁷ de Jonge, D., Scherer, M. & Rodger, S. (2007). *Assistive Technology in the Workplace*. St. Louis, MO: Mosby.

The Convention on the Rights of Persons with Disabilities (CRPD)⁸ underlines the significance and necessity of assistive and accessible technologies (including Information and Communication Technologies (ICT)) within its General Obligations (Article 4), and requires States Parties:

- To undertake or promote research and development of, and to promote the availability and use of new technologies, including information and communications technologies, mobility aids, devices and assistive technologies, suitable for persons with disabilities, giving priority to technologies at an affordable cost;
- To provide accessible information to persons with disabilities about mobility aids, devices and assistive technologies, including new technologies, as well as other forms of assistance, support services and facilities;

The CRPD recognizes the centrality of reasonable accommodation in education, work and employment, and habilitation and rehabilitation.⁹

"Reasonable accommodation" means necessary and appropriate modification and adjustments not imposing a disproportionate or undue burden, where needed in a particular case, to ensure to persons with disabilities the enjoyment or exercise on an equal basis with others of all human rights and fundamental freedoms¹⁰;

However, the potential of assistive devices to promote social and community participation of children with disabilities lies hugely unrealized as children in less-resourced settings continue to experience limited access, awareness and acquisition of needed technology products. Estimates suggest that only 5-15% of individuals who need assistive devices have access to it in the developing world.¹¹ Recent research studies in several countries in Africa show that barely 7-37% of individuals with disabilities have access to assistive technology.¹² This is primarily because assistive devices cannot be obtained or used in a vacuum. There are many different factors that impact their availability and optimum use in a community relevant legislation and regulations, sustainable and wide-reaching service delivery systems and distribution channels, funding mechanisms, trained practitioners and service delivery personnel, and maintenance and repair services.¹³⁻¹⁴ Furthermore, having access to assistive devices may be necessary, but not sufficient, to ensure the

⁸ Convention on the Rights of Persons with Disabilities, GA Res 61/106, UN Doc. A/RES/61/106 (Dec. 13, 2006)

⁹ See Articles 24, 26 and 27 of the CRPD

¹⁰ See Articles 2 of the CRPD

¹¹ WHO. (2008). Assistive devices/technologies. Retrieved September 27, 2012, from <http://www.who.int/disabilities/technology/activities/en/>

¹² See for example, Eide, A.H., & Kamaleri, Y. (2009, January). *Living Condition among People with Disabilities in Mozambique: a National Representative Study*. SINTEF Health Research.; Eide, A.H., & Loeb, M.E. (2006). *Living Condition among People with Disabilities in Zambia: a National Representative Study*. Loeb, M.E., & Eide, A.H. (2004). *Living Condition among People with Disabilities in Malawi: a National Representative Study*. SINTEF Health Research.

¹³ WHO/USAID. (2011). Joint position paper on the provision of mobility devices in less resourced settings. Retrieved September 27, 2012, from http://whqlibdoc.who.int/publications/2011/9789241502887_eng.pdf

¹⁴ Samant, D., Matter, R., & Harniss, M. (2012). Realizing the Potential of Accessible ICTs in Developing Countries. *Disability & Rehabilitation: Assistive Technology* (Informa Healthcare, 2012, doi:10.3109/17483107.2012.669022, available at <http://informahealthcare.com/doi/pdfplus/10.3109/17483107.2012.669022>) (Posted Online Ahead of Print Apr 5).

mainstreaming and inclusion of children with disabilities in their communities. Without accessible environments including accessible schools, public spaces, roads, and accessible modes of transportation, children with disabilities will not be able to fully realize the potential of assistive devices.

Another important dimension of promoting the equal participation of children with disabilities is digital inclusion which is absolutely necessary as ICTs have become pervasive and ubiquitous in almost all major domains of social activity including education, healthcare, social interaction, recreation, and skills development.¹⁵ ICTs hold tremendous potential for circumventing some of the traditional barriers to the inclusion of children with disabilities in regular education system and social participation. In fact, the lack of accessible ICTs and ICT-based development programming in today's world will further marginalize children with disabilities and diminish their future opportunities to be economically self-sufficient, enjoy their human rights and independence, and participate as full citizens in society.

Technology today permeates almost all development activities including health and nutrition and emergency and humanitarian actions, and ensuring access to accessible and assistive technologies to children with disabilities is hence an important element in all dimensions of development programming and decision-making. There is a need to bridge the world of disability and that of technology to create an inclusive environment that can influence:

- Policy;
- Global and national planning;
- Innovative programming and service provision;
- Advocacy and legal frameworks;
- Universal access to assistive devices; and
- Inclusive development.

Taskforce on Assistive Devices for Children with Disabilities

The task force's aim is to influence the universal access to assistive devices for children with disabilities and to equalize opportunities for educational participation and success, social and community engagement, skill and interpersonal development of children with disabilities. Furthermore, the capacity of children to be engaged, productive and be equal citizens in the future would be the central focus of the task force.

As a part of the Global Partnership on Children with Disabilities, the Task force on Assistive Devices will consider current gaps and seek to accelerate global effort towards innovation in order to develop and scale up programmes/projects/initiatives in the area of assistive devices.

The main objectives of the taskforce are:

¹⁵ *Id.*

- 1) To promote larger awareness about the need for and benefit of assistive technology;
- 2) To work towards universal access to assistive devices especially in low and middle income countries.
- 3) To establish sustainable and action-oriented collaboration to promote research, scaling up, sharing best practices and facilitate universal access to assistive devices,
- 4) To accelerate the inclusion of children with disabilities in all kinds of educational programmes including ECD, and
- 5) To support the development and implementation of sustainable policies and national frameworks/plans related to assistive devices and to influence global decision making in line with the CRPD.

While concentrating on the aspects above, the task force needs to work out the immediate and continuing steps that could be taken for systematically addressing issues of assistive devices and disabilities, facilitate linkages among key partners across realms of software, hardware and policy as well as ensure action-oriented steps, focusing on adolescents and children.

Proposed Areas of Engagement of the Task Force

A few areas which the Taskforce could engage in are outlined below. However, the next steps will be determined through consultations among various stakeholders such as users, developers, researchers, practitioners and policymakers.

- Develop a discussion paper addressing different aspects of universal access to assistive devices for children with disabilities;
- Through a participatory process, identify a range of open source and appropriate assistive devices which can enhance inclusion and access to education for children with disabilities. As one of the focus areas of GPE (Global Partnership on Education) is the *inclusion of children with disabilities through effective* use of technologies, the GPE could be approached to support testing of the tools in a few countries.
- Using a participatory approach, identify strategies to address barriers in access to low cost assistive technologies for children with disabilities, including factors such as accessible environments, trained personnel, funding, and resources for maintenance and repairs.
- Work with partners to select 2-3 innovative programmes/projects/activities in the context of the above.